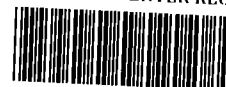


US EPA RECORDS CENTER REGION 5



1000453

UNOCAL CORPORATION
CHICAGO REFINERY
LEMONT, ILLINOIS 60439

RECEIVED

JAN 22 1987

CLOSURE CERTIFICATION REPORT

JANUARY 14, 1987

RECEIVED

FEB 03 1987

SOLID WASTE BRANCH
U.S. EPA, REGION V

ERM-NORTH CENTRAL, INC.
102 WILMOT ROAD
DEERFIELD, IL 60015

CLOSURE CERTIFICATION STATEMENT

The hazardous waste management unit at the facility described in this document has been closed in accordance with the specifications in the approved Closure Plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

ILDO415550567
USEPA ID Number

Unocal Corporation
Chicago Refinery
Lemont, IL 60439
Facility Name

^{DE}
¹⁻¹⁵⁻⁸⁷
John K. Bassett
Signature of Owner/Operator

John K. Bassett
Manager, Chicago Refinery
Name and Title

[Signature]
Signature of Registered P.E.

James W. Polich
Illinois Registration 062-041131
Name of Registered P.E. and
Registration Number

January 15, 1987
Date

CLOSURE DOCUMENTATION REPORT

RECEIVED
JAN 22 1987
IEPA-CLPC

INTRODUCTION

On February 27, 1986, the Illinois Environmental Protection Agency (IEPA) granted approval of Unocal's partial Closure Plan for the hazardous waste surface impoundment (S04) storage area. Subsequent to discussions and other correspondence between the IEPA and the company, Unocal submitted a letter on November 25, 1986, committing to the excavation and removal of approximately 6,000 cubic feet of soil from around Sample Location UO-1 in the upper cell of the surface impoundment (Figure 1).

VOLUME OF WASTE AND WASTE RESIDUE REMOVED

On Tuesday and Wednesday, November 18 and 19, 1986, Unocal, through it's contractor, Diamond Construction, excavated and removed approximately 4,000 cubic feet of soil around Sample Location UO-1, as shown on Figure 1. This excavated soil was stockpiled within Cell No. 1 until receipt of analytical results. The soil was then loaded into trucks operated by Petrochem Services, and transported to the Chemical Waste Management, Inc. CID Landfill, in Calumet City, Illinois. Copies of the manifests for these soils are included in Appendix A.

DOCUMENTATION OF "CLEAN CLOSURE"

To document that a "clean closure" had been accomplished, (i.e., soils not excavated have a residual total priority pollutant polynuclear aromatic hydrocarbon concentration less than 1.0 mg/kg) a representative sample from the next six (6) inches of soil, after the excavation was complete, was obtained. This sample was taken at the approximate center of the excavated area,

and was air expressed, using overnight delivery, to Rocky Mountain Analytical Laboratory, Arvada, Colorado.

The above soil sample was obtained on Monday, December 1, 1986, and the analytical effort expedited. Rocky Mountain Analytical Laboratory used Method 8270, (EPA-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods.") for their analysis. The complete laboratory report is included in Appendix B. As can be seen, all of the polynuclear aromatic hydrocarbons analyzed for were below the laboratory detection limit.

By letter dated December 11, 1986, Unocal provided the IEPA a description of the sampling protocol used to obtain the above representative soil sample. A copy of this letter is included as Appendix C.

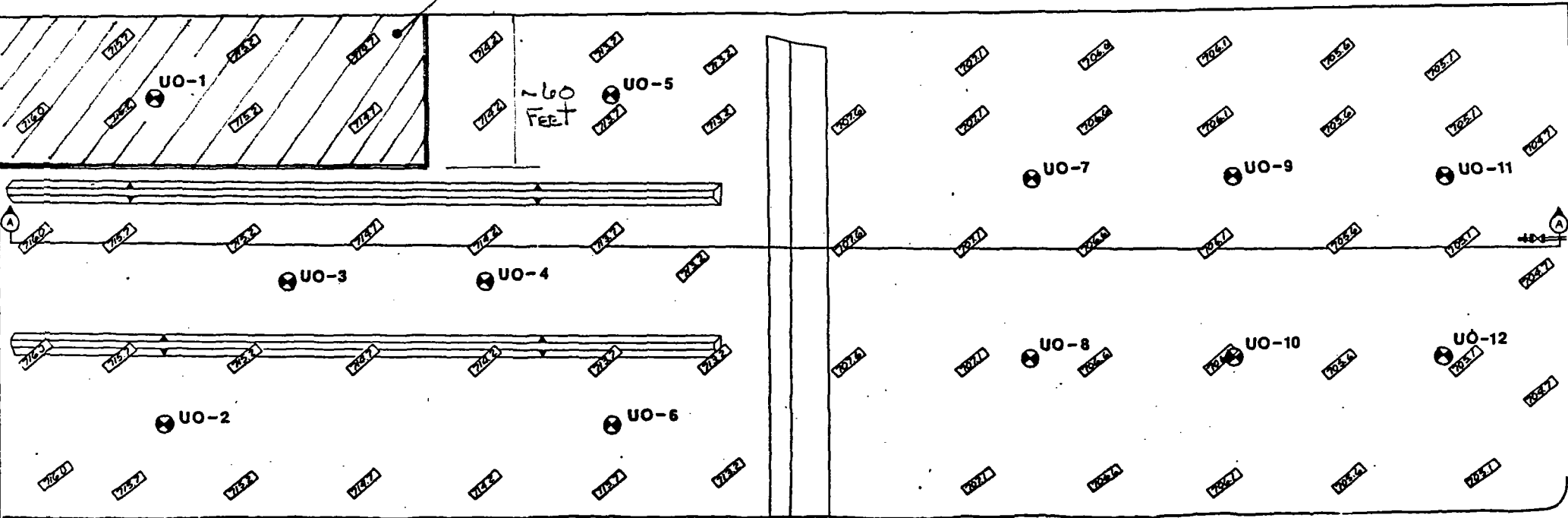
SUMMARY

Based on the information/data contained within the approved partial Closure Plan and the data contained herein, it is concluded that a "clean closure," as defined by the IEPA in their October 22, 1986 letter, has been accomplished.

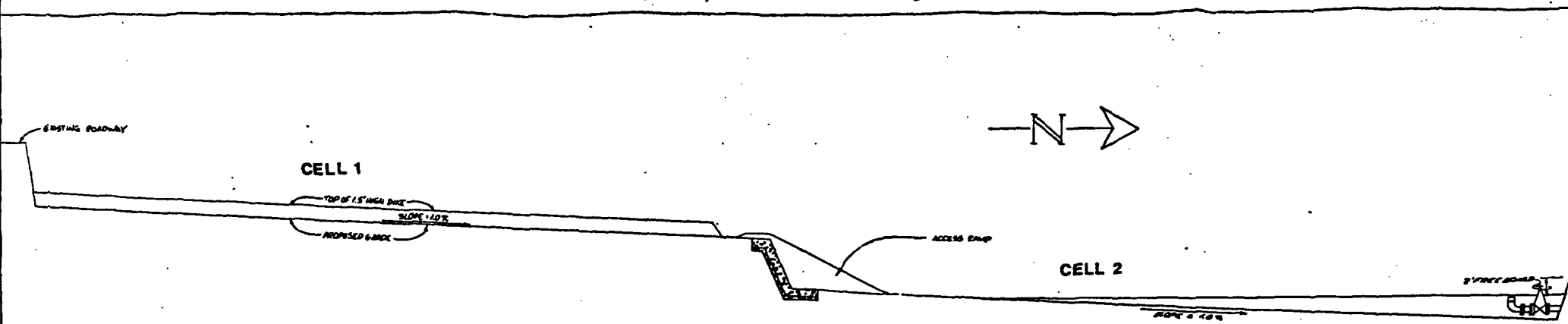
~ 200 FEET

AREA TO BE EXCAVATED

~ 60 FEET



EXISTING ROADWAY



LEGEND:

⊙ Proposed Location of Soil Boring

A TYPICAL STORAGE AREA SECTION
NO SCALE

REVISED 11/20/86

SURFACE ELEVATIONS AND SOIL BORINGS		FIGURE 1
DATE	11/20/86	
BY	JUP/SNY	ERM-North Central Inc.
CHECKED		
APPROVED		
SCALE		



Please print or type.

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (3-84)

Form Approved OMB No. 2050-0039 Expires 9-30-8

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD 041550567	Manifest Document No. 8575	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.
3. Generator's Name and Mailing Address UNOCAL, CHICAGO REFINERY 13501 STREET + NEW AVE LOMBARD, ILL 60439 ATTN: A.R. GILL				A. Illinois Manifest Document Number IL 1728575	
4. Generator's Phone (312) 257-7761				B. Illinois Generator's ID 11978030001	
5. Transporter 1 Company Name PETRE Chem				C. Illinois Transporter's ID 0156	
6. US EPA ID Number IL 085349264				D. () Transporter's Phone	
7. Transporter 2 Company Name				E. Illinois Transporter's ID	
8. US EPA ID Number				F. () Transporter's Phone	
9. Designated Facility Name and Site Address CHEM WASTE 13811 CALUMET EXP CALUMET CITY, ILL 60409				G. Illinois Facility's ID 10310390001	
10. US EPA ID Number ILD 010284248				H. Facility's Phone (312) 891-1500	
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers	13. Total Quantity	14. Unit	1. Waste No.
a. HM		No.	Type	Wt/Vol	EPA HW Number
ORM-E NA 9189					XXK1051
HAZARDOUS WASTE SOLID N.O.S.		001 D.T.	1000	2	8316816
b.					XX
c.					XX
d.					XX
J. Additional Descriptions for Materials Listed Above SOIL CONTAMINATED WITH API SEPARATOR SLUDGE		K. Handling Codes for Wastes Listed Above In Item #14 1 = Gallons 2 = Cubic Yards			
15. Special Handling Instructions and Additional Information 1st 15 yd 2nd 15 yd					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and Illinois regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.					
Printed/Typed Name STEPHEN K OSTAFIN		Signature Stephen K Ostafin		Date 12/2/98	
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name Rick Smith		Signature Rick Smith	
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
19. Discrepancy Indication Space					
20. Facility Owner or Operator		Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.		Date	
Printed/Typed Name FACIL METAL		Signature Carl Meyer		Date 12/2/98	



Please print or type.

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (3-84)

Form Approved. OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.	
3. Generator's Name and Mailing Address Lincoln, Chicago, Ill. 135th St. New Ave Lebanon, Ill 60431		AA: A.R. 6.11	ILD041550567	8572	A. Illinois Manifest Document Number IL 1728532	
4. Generator's Phone (312) 257-7761		6. US EPA ID Number ILD085379364		B. Illinois Generator's ID 19778030004		
5. Transporter 1 Company Name TEIRCO Chem		8. US EPA ID Number		C. Illinois Transporter's ID 01156		
7. Transporter 2 Company Name		10. US EPA ID Number		D. (312) 739-1150 Transporter's Phone		
9. Designated Facility Name and Site Address Chem Waste 135th + Calumet Expy Calumet City, Ill 60409		11. US-DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		E. Illinois Transporter's ID FI) Transporter's Phone		
12. Containers		13. Total Quantity		14. Unit Wt/Vol		
a. X OR 7-E NA 7187 Hazardous waste solid n.o.s.		No. Type 001 DT		2 010103103		
b.				EPA HW Number XX 146511 Authorization Number 8316816		
c.				EPA HW Number XX Authorization Number 8611004		
d.				EPA HW Number XX Authorization Number		
J. Additional Descriptions for Materials Listed Above Soil contaminated with API separator sludge		K. Handling Codes for Wastes Listed Above In Item #14 1 = Gallons 2 = Cubic Yards				
15. Special Handling Instructions and Additional Information 1st LOAD 15 YDS 2nd LOAD 15 YDS						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and Illinois regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.						
Printed/Typed Name STEPHEN K OSTAFIN		Signature Stephen K. Ostafin		Date Month Day Year 1 2 23 86		
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name DANIEL PHILLIPS		Signature Daniel Phillips		
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature		
19. Discrepancy Indication Space X 1. 0.11.000 TO CORRECT PERMIT # 861004		20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.		Date		
Printed/Typed Name CARL HESTER		Signature Carl Hester		Month Day Year 1 2 23 86		

Please print or type.

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (3-84)

Form Approved. OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.	
3. Generator's Name and Mailing Address LINDAL CHICAGO REFINERY 135 STREET + NEW AVE LEMON, ILL 60434 ATTN: A.R. GILL		6. US EPA ID Number ILD 04155567		A. Illinois Manifest Document Number IL 1728581		
4. Generator's Phone (312) 257-7761		8. US EPA ID Number		B. Illinois Generator's ID 119781030101014		
5. Transporter 1 Company Name TETRO Chem		6. US EPA ID Number ILD 085347267		C. Illinois Transporter's ID 03121014-1150		
7. Transporter 2 Company Name		8. US EPA ID Number		E. Illinois Transporter's ID F. Transporter's Phone		
9. Designated Facility Name and Site Address CHEM WASTE 138TH CALUMET EXP CALUMET CITY, ILL 60404		10. US EPA ID Number ILD 010284248		G. Illinois Facility's ID 103V039101011		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No. Type		13. Total Quantity 14. Unit Wt/Vol		
a. ORM-E NA 9189 HAZARDOUS WASTE SOLID H.O.S.		001 DT 00039		2		
b.						
c.						
d.						
J. Additional Descriptions for Materials Listed Above SOIL CONTAMINATED WITH API SEPARATOR SLUDGE		K. Handling Codes for Wastes Listed Above In Item #14 1 = Gallons 2 = Cubic Yards				
15. Special Handling Instructions and Additional Information NO. 1-15YDS NO. 2-15YDS						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and Illinois regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.						
Printed/Typed Name STEPHEN K. OSTAFIN		Signature Stephen K. Ostafin		Date 122686		
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name DAVID L. WATTS		Signature David L. Watts		
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature		
19. Discrepancy Indication Space 21. HAZARDOUS WASTE MANIFEST # (010)						
20. Facility Owner or Operator		Printed/Typed Name C. J. J. J. J.		Signature C. J. J. J. J.		

IN ILLINOIS: 217 / 782-3637

24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS

OUTSIDE ILLINOIS: 800 / ~~424~~-8802 or 202 / 426-2675

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 FACILITY PART - 4 TRANSPORTER PART - 5 IEPA PART - 6 GENERATOR

REV #6

GENERATOR COPY - PART 1- DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED

This Agency is authorized to require, pursuant to Illinois Revised Statutes, 1983, Chapter 111 1/2, Section 21 that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator of not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.



Please print or type.

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (3-84)

Form Approved. OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. TLD 041550567	Manifest Document No. 8577	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.	
3. Generator's Name and Mailing Address UNION CHICAGO REFINERY 135TH STREET & NEW AVE LEMONT, ILL 60434 ATTN: A.R. GILL				A. Illinois Manifest Document Number IL 1728573		
4. Generator's Phone (312) 257-7761				B. Illinois Generator's ID 119780310004		
5. Transporter 1 Company Name TETRA CHEM				C. Illinois Transporter's ID 01516		
6. US EPA ID Number TLD 085549064				D. (312) 739 1150 Transporter's Phone		
7. Transporter 2 Company Name				E. Illinois Transporter's ID		
8. US EPA ID Number				F. () Transporter's Phone		
9. Designated Facility Name and Site Address CHEM WASTE 135TH CALUMET EXP CALUMET CITY, ILL 60409				G. Illinois Facility's ID 1031031900011		
10. US EPA ID Number TLD 010384248				H. Facility's Phone (312) 891-1500		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	L Waste No.	
a. <input checked="" type="checkbox"/> HM ORN-E NA 9184 HAZARDOUS WASTE SOLID N.O.S.		001	DT	01000210	2	
b. <input type="checkbox"/>						
c. <input type="checkbox"/>						
d. <input type="checkbox"/>						
J. Additional Descriptions for Materials Listed Above SOIL CONTAMINATED WITH API SEPARATOR SLUDGE				K. Handling Codes for Wastes Listed Above In Item #14 1 = Gallons 2 = Cubic Yards		
15. Special Handling Instructions and Additional Information 1ST LOAD 15 YDS. 2ND LOAD 15 YDS.						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and Illinois regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.						
Printed/Typed Name STEPHEN K OSTAFIN		Signature Stephen K Ostafin		Date Month Day Year 1 2 29 86		
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature DANIEL PHILLIPS		Date Month Day Year 1 2 29 86		
Printed/Typed Name DANIEL PHILLIPS		Signature Daniel Phillips		Date Month Day Year 1 2 29 86		
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date Month Day Year		
Printed/Typed Name		Signature		Date Month Day Year		
19. Discrepancy Indication Space X 1. ... TO ... (C.R.)						
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.				Date Month Day Year 1 2 29 86		
Printed/Typed Name C. ...		Signature C. ...		Date Month Day Year 1 2 29 86		

IN ILLINOIS: 217 / 782-3637

24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS

OUTSIDE ILLINOIS: 800 / 424-8802 or 202 / 426-2675

DISTRIBUTION: PART - 1 GENERATOR PART - 2 IEPA PART - 3 FACILITY PART - 4 TRANSPORTER PART - 5 IEPA PART - 6 GENERATOR

REV #6

GENERATOR COPY - PART 1- DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.

This form is authorized to require, pursuant to Illinois Revised Statutes, 1983, Chapter 117, Section 21, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator of not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

Please print or type.

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (3-84)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD 041520567	Manifest Document No. 8578	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.	
3. Generator's Name and Mailing Address UNION CHICAGO REFINERY 135TH STREET + KALAMAZOO LEMONT, ILL 60439 ATTN: A.R. GILL				A. Illinois Manifest Document Number IL 1728578		
4. Generator's Phone (312) 257-7761				B. Illinois Generator's ID 119780300014		
5. Transporter 1 Company Name JITCO (HOM)				C. Illinois Transporter's ID 0156		
6. US EPA ID Number ILC 085349264				D. (312) 739-1150 Transporter's Phone		
7. Transporter 2 Company Name				E. Illinois Transporter's ID		
8. US EPA ID Number				F. () Transporter's Phone		
9. Designated Facility Name and Site Address CHEM WASTE 135TH CALUMET EXPY CALUMET CITY, ILL 60409				G. Illinois Facility's ID 1031103900101		
10. US EPA ID Number ILD C10284248				H. Facility's Phone (312) 891-1500		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers No.	13. Total Quantity	14. Unit Wt/Vol
a. ORM-E NA 9189 HAZARDOUS WASTE SOLID H.C.S.				001	DT C 0103 C	2
b.						
c.						
d.						
J. Additional Descriptions for Materials Listed Above SOIL CONTAMINATED WITH API SEPARATOR SLUDGE				K. Handling Codes for Wastes Listed Above In Item #14 1 = Gallons 2 = Cubic Yards		
15. Special Handling Instructions and Additional Information 1ST LOAD 15 YDS 2ND LOAD 15 YDS						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and Illinois regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.						
Printed/Typed Name STEPHEN K. OSTAFIN				Signature Stephen K. Ostafin		Date Month Day Year 123086
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature Daniel Phillips		Date Month Day Year 123086
Printed/Typed Name DANIEL PHILLIPS				Signature Daniel Phillips		Date Month Day Year 123086
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature		Date Month Day Year
Printed/Typed Name				Signature		Date Month Day Year
19. Discrepancy Indication Space						
Facility Owner or Operator Printed/Typed Name BLANNE GUTCHENSKY				Signature Blanne Gutchenksy		Date Month Day Year 123086
Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.				Signature		Date
Printed/Typed Name				Signature		Date
24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* OUTSIDE ILLINOIS: 800 / 426-8802 or 202 / 426-2675						
GENERATOR PART - 2 IEPA		PART - 3 FACILITY		PART - 4 TRANSPORTER		PART - 5 IEPA PART - 6 GENERATOR

GENERATOR COPY - PART 1 - DO NOT REMOVE PART 1 FROM SET UNTIL COMPLETED.
 Pursuant to Illinois Revised Statutes, 1983, Chapter 111, Section 21, this information is submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner of 10 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management.

Rocky Mountain Analytical Laboratory

4955 Yarrow Street, Arvada, CO 80002 (303) 421-6611

A DIVISION OF
ENSECO
INCORPORATED

December 8, 1986

Greg Verret
ERM-NC
835 Sterling Ave., Suite 200
Palatine, IL 60067

Dear Greg:

Enclosed are the results for your one solid sample which we received in our laboratory on December 2, 1986.


Please call if you have any questions.

Sincerely,



Jeannie Brooks
Project Coordinator

Reviewed by: -



Mark J. Bollinger, Ph.D.
Technical Director

JTB/MJB/bjb
Enclosures

RMAL # 62472

SAMPLE DESCRIPTION INFORMATION

for

ERM - NC

<u>RMA Sample No.</u>	<u>Sample Description</u>	<u>Sample Type</u>	<u>Date Sampled</u>	<u>Date Received</u>
62472-01	Wastewater Lagoon Floor	Solid	12/01/86	12/02/86

December 8, 1986

ANALYTICAL RESULTS

for

ERM - NC

POLYNUCLEAR AROMATIC HYDROCARBONS

<u>Parameter</u>	<u>Units</u>	<u>62472-01</u>	
Acenaphthene	ug/kg	BDL	(160)
Acenaphthylene	ug/kg	BDL	(160)
Anthracene	ug/kg	BDL	(160)
Benzo(a)anthracene	ug/kg	BDL	(160)
Benzo(a)pyrene	ug/kg	BDL	(160)
Benzo(b)fluoranthene	ug/kg	BDL	(160)
Chrysene	ug/kg	BDL	(160)
Dibenzo(a,h)anthracene	ug/kg	BDL	(160)
Fluoranthene	ug/kg	BDL	(160)
Fluorene	ug/kg	BDL	(160)
Indeno(1,2,3-cd)pyrene	ug/kg	BDL	(160)
Naphthalene	ug/kg	BDL	(160)
Phenanthrene	ug/kg	BDL	(160)
Pyrene	ug/kg	BDL	(160)
1-Methyl naphthalene	ug/kg	BDL	(160)

BDL = Below Detection Limits. Detection limits in parentheses.

Rocky Mountain Analytical Laboratory
4955 Yarrow Street, Arvada, CO 80002 (303) 421-6611

A DIVISION OF
ENSECO
INCORPORATED

December 03, 1986

GREG VERRET
ERM-NC
835 STERLING AVE. SUITE 200
PALATINE, IL 60067

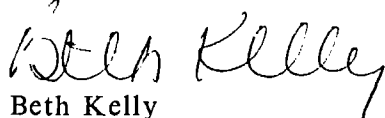
Dear Mr. Verret:

This is to acknowledge that we received your 1 sample at our laboratory. It has been assigned our lab project number 62472. Enclosed is a sample description form indicating our sample number and your corresponding identification and a copy of the Chain of Custody.

For questions or assistance please contact the following people:

Project status and technical issues - Jeanne Brooks
Additional bottles - Beth Kelly

Sincerely,



Beth Kelly
Supervisor
Client Services

12/03/86

SAMPLE DESCRIPTION INFORMATION

for

ERM-NC

<u>RMA</u> <u>Sample No.</u>	<u>Sample Description</u>	<u>Sample Type</u>	<u>Date</u> <u>Sampled</u>	<u>Date</u> <u>Received</u>
*62472-001	WASTEWATER LAGOON FLOOR	Solid	12/01/86	12/02/86

RECEIVED
FEB 03 1987
SOLID WASTE BRANCH
U.S. EPA REGION V

* = Receipt of this new sample is acknowledged by this letter

62475

P.O. 603354

Distribution: Original
 FEB 03 1987
 SOLID WASTE DIVISION
 U.S. EPA. REGION V

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

Unocal Refining & Marketing Division

Unocal Corporation
Chicago Refinery
Lemont, Illinois 60439
Telephone (312) 257-7761

ENV 265-86

UNOCAL 76

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
#P 313 581 762

John K. Bassett
~~Ask Elmhurst~~
Manager, Chicago Refinery
Eastern Region

December 11, 1986

Mr. W. Robert Watson
Illinois Environmental Protection
Agency
Division of Land Pollution
Control
2200 Churchill Road
Springfield, Illinois 62706

Dear Sir:

Impoundment Sampling Protocol

As you requested, attached is the sampling protocol which was used to obtain a representative sample of the landfarm area impoundment which is undergoing clean closure. This letter is to supplement the November 25, 1986 Impoundment Closure Plan Modification letter (ENV 253-86).

Should you have any questions, please contact L. D. Erchull at the above telephone number.

Very truly yours,

DW Bruckert
D. W. Bruckert, Supervisor
Environmental Services

LDE/rm

Attachment

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SOLID WASTE BRANCH
U.S. EPA, REGION V

ERM-North Central, Inc.

ATTACHMENT A

SAMPLING PROTOCOL FOR SOIL SAMPLING AT UNOCAL'S SURFACE IMPOUNDMENT CELL NO. 1 LOCATED IN LEMONT, ILLINOIS

The following sampling procedures were used to obtain a representative sample of the upper six-inch soil layer of Surface Impoundment - Cell No. 1 at Unocal's Lemont, Illinois facility:

1. One (1) soil boring was located at the center of the surface impoundment cell.
2. Using a "bucket-type" hand auger, the soil boring was advanced to a depth of six inches.
3. Auger flights from the entire depth of the soil boring were retrieved and placed on clean sheet of plastic.
4. A representative sample of the 0 - 6 inch soil layer was obtained by mixing the auger flights and filling the required sample container (16 ounce teflon-lined glass jar).
5. The sample was preserved with ice and shipped to Rocky Mountain Analytical Laboratory with an appropriate chain-of-custody form.

The sample was analyzed for polynuclear aromatic hydrocarbons using Method 8270 from EPA SW-846.